



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



شبكة المعلومات الجامعية  
@ ASUNET



# شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





شبكة المعلومات الجامعية

# جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

## قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها  
علي هذه الأفلام قد أعدت دون أية تغيرات



## يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of  
15-25- c and relative humidity 20-40%

# بعض الوثائق الأصلية تالفة

# بالرسالة صفحات لم ترد بالاصل



**EVALUATION OF GENOTOXIC AND HISTOPATHOLOGIC  
EFFECTS OF THE TRICYCLIC ANTIDEPRESSANT DRUG:  
AMITRIPTYLINE IN MALE ALBINO MICE**

599,3233

2.0107

A Thesis

Submitted to the Faculty of Science, Cairo University in Partial Fulfillment  
of the Requirements for the Degree of M. Sc. in  
**Cell biology, Histology and Genetics**

By

**Walaa Mohamed Radwan Ahmed**

B. Sc. Chemistry/Zoology

Department of Zoology

Faculty of Science

Cairo University

2011





CAIRO UNIVERSITY  
FACULTY OF SCIENCE

## TO WHOM IT MAY CONCERN

This is to certify that **Walaa Mohamed Radwan Ahmed**. Has attended and passed successfully the following Postgraduate Courses as a Partial Fulfillment of the requirements of the degree of Master of Science (Cytology, Histology & Genetics, 2006).

- 1- Histochemistry
- 2- Enzyme Immunohistochemistry
- 3- Cellular Genetics.
- 4- Molecular Genetics.
- 5- Tissue Culture.
- 6- Immunology.
- 7- Biotechnology.
- 8- Cell Pathology.
- 9- Endocrinology.
- 10- Cancer Biology.
- 11- Advanced Cytology.
- 12- Advanced Cell Biology.
- 13- Developmental Biology
- 14- Ultrastructural Histology.
- 15- Biochemical Taxonomy.
- 16- Neurophysiology.
- 17- Radiobiology.
- 18- Microtechniques & Electron Microscopy.
- 19- Biostatistics.
- 20- Computer Science
- 21- German Language

This Certificate is issued at his own request.

**Date of Birth:** 2/11/1980

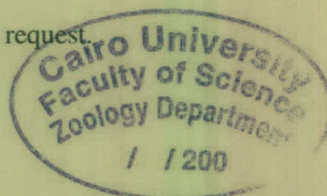
**Place of Birth:** Cairo

**Controller**

*A. Mansour*  
**Prof. Dr. Anwar Bakr Mansour**

**Head of Zoology Department**

*A-R Bashtar*  
**Prof. Dr. Abdel-Rahman Bashtar**









Faculty of Science  
Zoology Department

## APPROVAL SHEET

Title of M. Sc. Thesis:

"Evaluation of genotoxic and histopathologic effects of the tricyclic antidepressant drug: amitriptyline in male albino mice"

Name of the candidate:

**Walaa Mohamed Radwan  
Ahmed**

Supervisor Committee:

1- **Prof. Dr. Mohamed Akmal A. El-Ghor**  
Professor of Genetics,  
Zoology Department, Faculty of Science  
Cairo University

*Akmal A. El-Ghor*

2- **Prof. Dr. Mohamed S. Hassanane**  
Professor of Animal Genetics,  
Head of Cell Biology Department,  
National Research Center

*Moh. S. Hassanane*



Head of Zoology Department

*A-R Bashtar*  
**Prof. Dr. Abdel-Rahman Bashtar**





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# Dedication

*I dedicate this thesis with gratitude and love to my family and friends whom greatly suffered with me patiently during that study.*

*Special thanks to my great and incredibly gifted professors, without their help in this thesis, it would never have been written.*

*Finally, I would like to thank all and everyone who helped me.*

*Thank you all very much.*

***Walaa Mohamed Radwan***



